CLAIMS:

1. A nucleic-acid amplifying apparatus comprising:

a flow passage, through which a reaction fluid containing a sample containing a nucleic acid and a reagent flows, said flow passage including,

a flow passage branch portion, at which the flow passage branches into a plurality of branch flow passages,

a junction portion, at which the plurality of branch flow passages join, and

a joined flow passage, through which the reaction fluid as joined is conducted; and

a heating mechanism having a plurality of set temperature zones provided on the branch flow passages.

2. A nucleic-acid amplifying apparatus according to claim 1, wherein the heating mechanism comprises a first heating mechanism at a first temperature and a second heating mechanism at a second temperature lower than the first temperature, and the branch flow passages are arranged so as to repeatedly pass through a zone heated by the second heating mechanism and another zone heated by the first heating mechanism.

3. A nucleic-acid amplifying apparatus comprising:

a flow passage, through which a reaction fluid containing a sample containing a nucleic acid and a reagent flows, said flow passage including,

a first branch portion, at which the flow passage branches,

first branch flow passages branching off the first branch portion,

a first junction portion, at which the first branch flow passages join together,

a second branch portion, at which a flow passage joined at the first junction portion branches again,

second branch flow passages branching off the second branch portion, and

a second junction portion, at which the second branch flow passages join together; and

a heating mechanism having a plurality of set temperature zones provided on the first branch flow passages and the second branch flow passages.

4. A nucleic-acid amplifying apparatus according to claim 3, wherein the second branch flow passages are formed to be longer than the first branch flow passages.

5. A nucleic-acid amplifying apparatus according to claim 3, wherein the reaction fluid flowing through the first branch flow passages and the second branch flow passages is repeatedly maintained at the plurality of set temperatures by the heating mechanisms, and the number of times, at which the reaction fluid flowing through the second branch flow passages is subjected to temperature change by the heating mechanism, is made

larger than the number of times, at which the reaction fluid flowing through the first branch flow passages is subjected to temperature change by the heating mechanism.

6. A nucleic-acid amplifying apparatus according to claim 3, further comprising a flow passage or passages provided between the first branch flow passages and the second branch flow passages to allow a reagent to be supplied.

7. A nucleic-acid amplifying apparatus according to claim 1, further comprising a first branch flow passage and a second branch flow passage that are communicated to the junction portion, a first heating mechanism that puts the first branch flow passage at a first heating temperature, and a second heating mechanism that puts the second branch flow passage at a second heating temperature.

8. A chemical analysis apparatus comprising:

a flow passage, through which a reaction fluid containing a sample containing a nucleic acid and a reagent being mixed with the sample flows, said flow passage including,

a flow passage branch portion, at which the flow passage branches into a plurality of branch flow passages,

a junction portion, at which the plurality of branch flow passages join together,

a joined flow passage, through which the

reaction fluid as joined is conducted, and

a detection part that detects the nucleic acid in the reaction fluid conducted to the joined flow passage; and

a heating mechanism having a plurality of set temperature zones provided on the branch flow passages, wherein the heating mechanism is formed such that the branch flow passages repeatedly pass through the plurality of set temperature zones.

9. A nucleic-acid amplifying method comprising:

a branch step for branching a reaction fluid containing a sample containing a nucleic acid and a reagent being mixed with the sample;

a repeated heating and cooling step for repeatedly heating and cooling the branched reaction fluid parts between a plurality of set temperatures; and

a junction step for joining the plurality of branched reaction fluid parts that have been repeatedly heated and cooled.

10. A nucleic-acid amplifying method comprising:

a first branch step for branching a reaction fluid containing a sample containing a nucleic acid and a reagent being mixed with the sample;

a first repeated heating and cooling step for repeatedly heating and cooling the branched reaction fluid parts between a plurality of set temperatures;

a first joining step for joining the

plurality of branched reaction fluid parts that have been repeatedly heated and cooled;

a second branch step for branching the joined reaction fluid again;

a second repeated heating and cooling step for repeatedly heating and cooling the reaction fluid parts, that have branched in the second branch step, between a plurality of set temperatures; and

a second joining step for joining a plurality of the branched reaction fluid parts that have been repeatedly heated and cooled in the second repeated heating and cooling step.

11. A nucleic-acid amplifying method according to claim 10, wherein the number of times, at which heating is repeated in the second repeated heating and cooling step, is made larger than the number of times, at which heating is repeated in the first repeated heating and cooling step.